

MARINE ORGANISMS

Group Contract, Fall 1976 - Peter Taylor, Sponsor

The animals and plants of the open sea and coastal waters were surveyed, with principal emphasis on marine invertebrates. Marine algae, vascular plants, and marine vertebrates were considered more briefly. The main features of the marine environment as a biological habitat and the adaptations of organisms to life in the sea were also studied. This study program included lectures, films, reading, seminars, laboratory studies and field-site visits.

Lectures and Films

Topics of lectures by the sponsor were: introduction to marine environments and marine organisms, marine plants--general review, plankton and ocean productivity, and systematic review of marine fishes, reptiles and birds. Films shown were: The Restless Sea, The Beach-A River of Sand, Tides of the Ocean, Waves Across the Pacific, and Signals for Survival (seagull behavior). Additional lectures heard were on studies of dispersal strategies of barnacle larvae (R. Strathmann) and octopus behavior (E. Dorsey).

Texts

Barnes, R.D. 1974. Invertebrate Zoology. Saunders; Hardy, A.C. 1965. The Open Sea. Houghton Mifflin; Harrison, R.J. and J.E. King 1965. Marine Mammals. Hutchinson; Kozloff, E.N. 1973. Seashore Life of Puget Sound, The Strait of Georgia, and The San Juan Archipelago. Univ. of Washington; Kozloff, E.N. 1974. Keys to the Marine Invertebrates of Puget Sound, The San Juan Archipelago, and Adjacent Regions. Univ. of Washington; Sumich, J.L. 1976. Introduction to the Biology of Marine Life. Wm. C. Brown.

Seminars

Weekly sessions were held to review and discuss assigned reading in the texts. Study questions were assigned for discussion or written responses. In addition, biological resumés of selected species were presented by each participant, first on an invertebrate or seaweed, and the second time on a marine vertebrate. During the last week of instruction presentations were given on topics selected by each person.

Laboratories

Laboratory sessions were oriented to mixed assemblages of organisms collected during field trips. Specimens were examined for general familiarization and identification. The group resided seven days at the University of Washington's Friday Harbor Laboratories, featuring daily laboratory experience with organisms collected in the San Juan Islands. The development of skill in recording observations in a laboratory notebook was an essential feature of the program.

Field Trips

Field trips included: Olympic Peninsula rocky intertidal -- two trips, Rialto Beach (overnight) and Mukkaw Bay (overnight); Point Defiance Aquarium, Tacoma; San Juan Islands (while at Friday Harbor) -- boat trip for bottom dredging and trawling and intertidal habitats at Cattle Point and False Bay, San Juan Island. The Mukkaw Bay and Cattle Point visits were done jointly with Dr. Tom Mumford, a marine botanist.